Having described the invention, we claim:

1. A method for routing an entity through a predetermined area for scanning the content of the predetermined area, said method comprising the steps of:

partitioning the predetermined area into cells;

determining a starting cell for the entity;

initiating a scan of a number of the cells from the starting cell and determining the content of each of the number of cells; and

determining a total cost for the entity to travel to each of the scanned cells and performing a scan from each of the scanned cells.

2. The method as set forth in claim 1 wherein said cost determining step comprises:

determining a travel cost for the entity to travel to each of the scanned cells; and

determining a scan cost for performing a scan from each of the scanned cells.

3. The method as set forth in claim 1 further including the step of determining a next scan with a minimum total cost.

4. The method as set forth in claim 3 further including a step determining movement of the entity to the next scan cell.

5. The method as set forth in claim 3 further including the step of redesignating the next scan cell as the starting cell.

6. The method as set forth in claim 1 further including the step of starting said method over again.

7. The method as set forth in claim 2 further comprising the step of algebraically transforming the cost of traveling to a next scan cell.

8. The method as set forth in claim 2 further comprising the step of algebraically transforming the scan cost.

9. The method as set forth in claim 1 further comprising the step of subtracting a benefit amount from the total cost.

10. A system for scanning a target portion of a predefined search area, said system comprising:

a sensor for scanning a first part of the predefined search area from a starting point; and

a device for analyzing output from said sensor and determining a destination point within the predefined search area for said sensor,

said sensor scanning a second part of the predefined search area from the destination point, the first part and the second part together comprising a part of the predefined search area at least as large as the target portion of the predefined search area.

11. The system as set forth in claim 10 wherein said device is a computer.

12. A computer program product for determining a route for an entity through a predetermined area and for analyzing the content of the predetermined area, said product comprising:

a first procedure that partitions the predetermined area into cells;

a second procedure that determines a starting cell for the entity;

a third procedure that initiates a scan of a number of the cells from the starting cell and determines the content of each of the number of cells; and

a fourth procedure that determines a total cost for the entity to travel to each of the scanned cells and for performing a scan from each of the scanned cells.

13. The computer program product as set forth in claim 12 further including a fifth procedure that selects a next scan with a minimum total cost.

14. The computer program product as set forth in claim 12 further including a fifth procedure for determining movement of the entity to the next scan cell.

15. The computer program product as set forth in claim 12 further including a fifth procedure that redesignates the next scan cell as the starting cell.

16. The computer program product as set forth in claim 12 further including a fifth procedure that returns to the third procedure.

17. The computer program product as set forth in claim 12 wherein said fourth procedure further includes algebraically transforming the total cost.

18. The computer program product as set forth in claim 17 wherein said fourth procedure further includes subtracting a benefit amount of each cell from the total cost.